4 VISUAL EFFECTS

Visual impacts of the proposed project were determined by assessing changes in the visual quality of viewsheds from the perspective of the landscape units, and then predicting the viewer group's response to that change. Photo simulations were used to predict the visual change from key views. All changes were considered from the perspective of the viewer groups and their sensitivity toward the visual environment. Changes to visual resources were assessed by review of the proposed project's design (refer to Figure 3), focusing on construction of new connections, roadway improvements, including streetscape elements, and the removal of trees and landscape areas.

4.1 Changes to Visual Character

The proposed project's impacts on the visual quality of the landscape units, and the selected key views within those landscape units, are described in terms of the vividness, intactness, and unity criteria (refer to Section 2.5) in the following sections. Table 15 provides a summary of the visual quality change of each key view.







Table 15: Visual Quality Rating Changes by Key View.

Key view	Existing Condition	Proposed Condition	Visual Quality Change
View 1a - Porter Avenue Looking Southwest (Roundabout Option)	Moderately low	Moderately Low	Slight Increase
View 1b - Porter Avenue Looking Southwest (Intersection Option)	Moderately low	Moderately Low	No change
View 2 - Front Park Looking South	High	High	No change
View 3 - Front Park Looking Northwest	Moderate / Average	Moderate / Average	No change
View 4 - Front Park Looking East	Moderate / Average	Moderate / Average	Slight Increase
View 5 - Busti Avenue Looking West	Moderate / Average	Moderate / Average	Slight Increase
View 6 - Vermont Street Looking Southwest	Low	Low	No change
View 7 - Shoreline Trail Looking South	Moderate / Average	Moderately low	Slight Decrease
View 8 - Southbound I-190 Looking South	Moderately low	Moderately low	Slight Increase
View 9 - Shoreline Trail Looking North	Moderately high	Moderately low	Slight Decrease
View 10a - Porter Avenue Looking Northeast (Roundabout Option)	Moderate / Average	Moderate / Average	Slight Increase
View 10b - Porter Avenue Looking Northeast (Intersection Option)	Moderate / Average	Moderate / Average	Slight Decrease
View 11 - D'Youville College Athletic Fields Looking North	Moderate / Average	Moderately low	Slight Decrease



4.1.1 View 1a - Porter Avenue Looking Southwest (Roundabout Option)

The roundabout in the background is the only change to the visual environment. Porter Avenue remains the dominate element within the viewshed. The roundabout reduces the linear alignment by encroaching to the north and south, eliminating some vegetation. The foreground and middleground remain unchanged since the improvements are within the existing right-of-way.

Vividness: The foreground and middleground views are dominated by Porter Avenue, roadside landscaping, and commercial buildings are typical and unmemorable. The background view of Lake Erie remains obstructed by the roundabout and rising Porter Avenue that crosses the I-190. The introduction of the roundabout provides a focal point in the background. The vividness rating is low.

Intactness: The roundabout further divides the vegetation along the background by increasing pavement to the north and south. The street trees and maintained lawn along Porter Avenue provides a continuous green strip from foreground to background. The intactness rating is moderately low.

Unity: The street trees and grass strips along Porter Avenue visually link the foreground and background. The continuous corridor of Porter Avenue provides supportive colors, textures and materials. The lawn areas are well maintained with little visual clutter from roadside signals and utilities. The unity rating is moderate/average.

Table 16: View 1 - Proposed Visual Quality Evaluation Summary.

View	Vividness	Intactness	Unity	Visual Quality
View 1 - Porter Avenue Looking Southwest	2.5	2.5	4.0	3.0



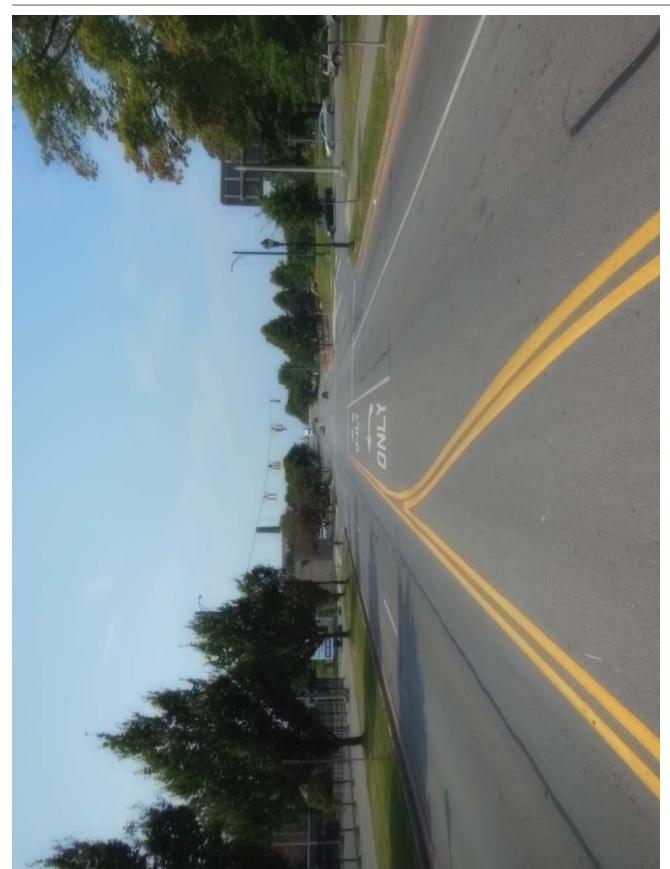
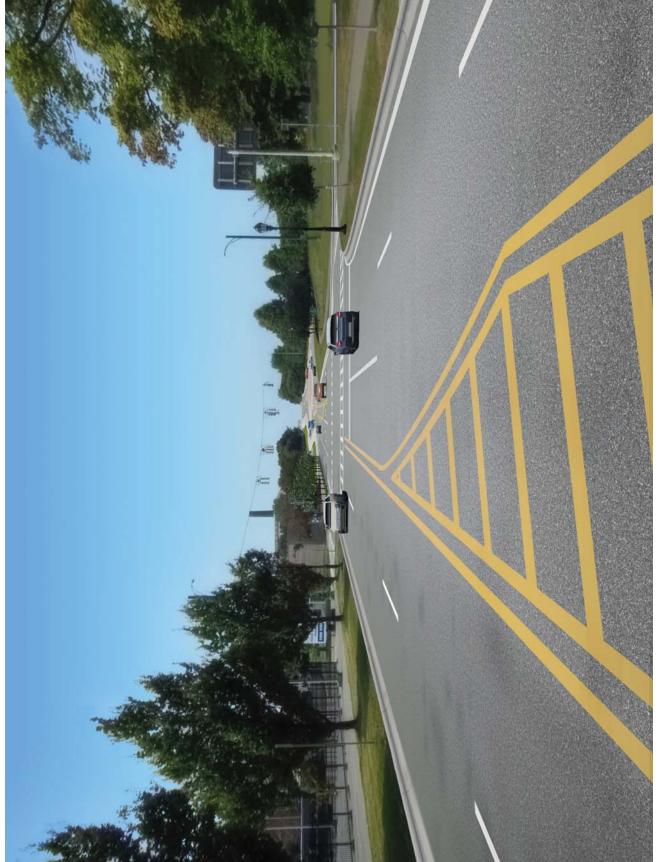


Figure 27: View 1 - Existing View Looking Southwest











4.1.2 View 1b - Porter Avenue Looking Southwest (Intersection Option)

Very little has visually changed to this viewshed. Porter Avenue remains the dominate element within the viewshed. Proposed Ramp PN encroaches in the background to the north, eliminating some vegetation. The foreground and middleground remain unchanged since the improvements are within the existing right-of-way.

Vividness: The foreground and middleground views are dominated by Porter Avenue, roadside landscaping, and commercial buildings are typical and unmemorable. The background view of Lake Erie remains obstructed by the intersection and rising Porter Avenue that crosses the I-190. The vividness rating is low.

Intactness: Porter Avenue divides the vegetation along the background. The street trees and maintained lawn along Porter Avenue provides a continuous green strip from foreground to background. The intactness rating is moderately low.

Unity: The street trees and grass strips along Porter Avenue visually link the foreground and background. The continous corridor of Porter Avenue provides supportive colors, textures and materials. The lawn areas are well maintained with little visual clutter from roadside signals and utilities. The unity rating is moderate/average.

Table 17: View 1 - Proposed visual quality evaluation summary.

View	Vividness	Intactness	Unity	Visual Quality
View 1 - Porter Avenue Looking Southwest	1.5	3	4	2.8

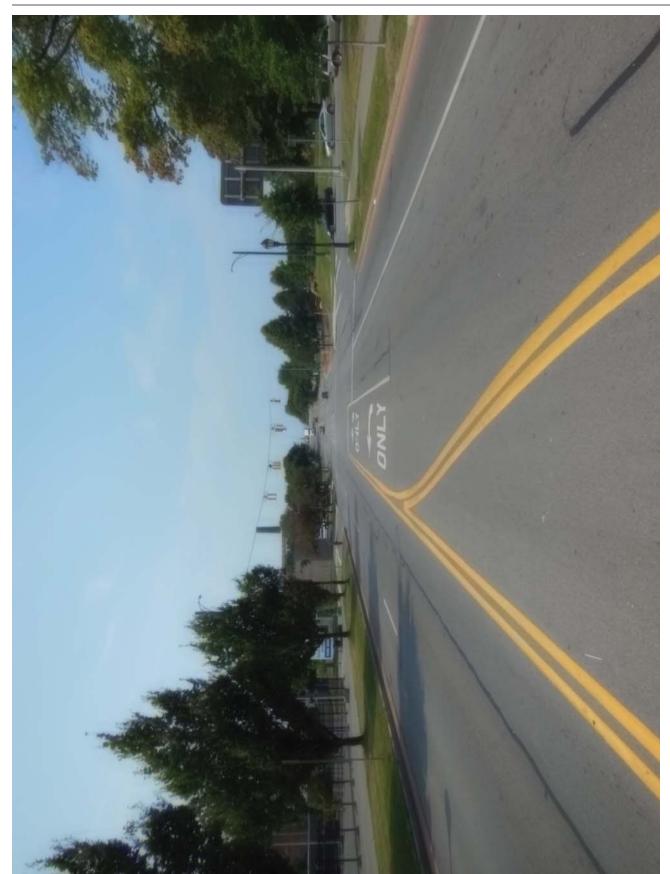
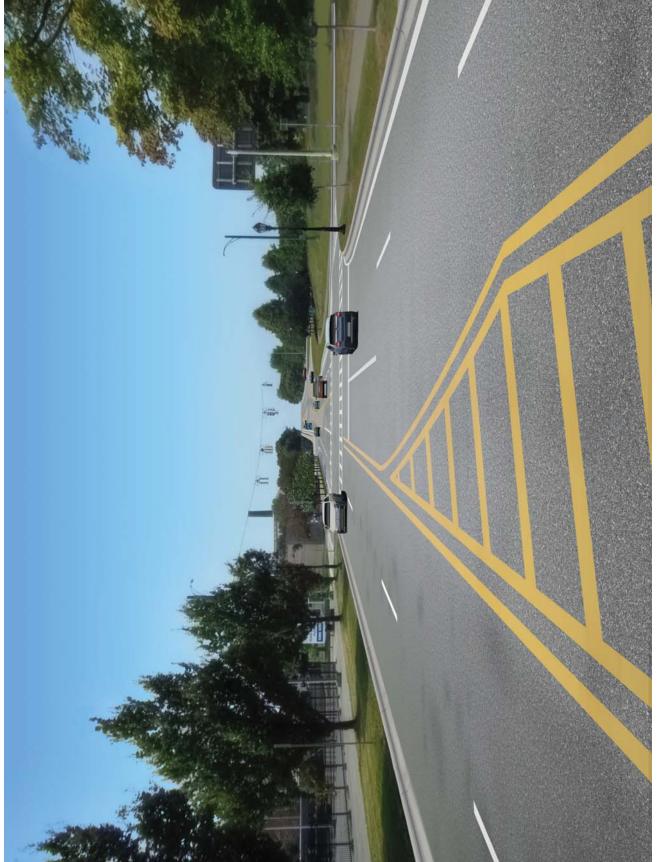


Figure 29: View 1 - Existing View Looking Southwest









4.1.3 View 2 - Front Park Looking South

Very little has visually changed to this viewshed. The existing vegetative buffer along the park's edge screens the user's view of the improvements. Ramp PN is unnoticeable. The park's manicured plant beds and lawn remain the dominate elements within the viewshed.

Vividness: The meandering multi-use trail presents an attractive sight in the middle/backgrounds. The well maintained landscaping and mature trees provide a striking viewshed which makes it memorable. The vividness rating is high.

Intactness: The landscaping is intact except for the minor gap off to the right in the middleground. The landscaping is also contextually linked from the foreground to the background by the meandering multi-use trail. Minimal man-made features dot the landscape providing a more naturalized viewshed. The intactness rating is very high.

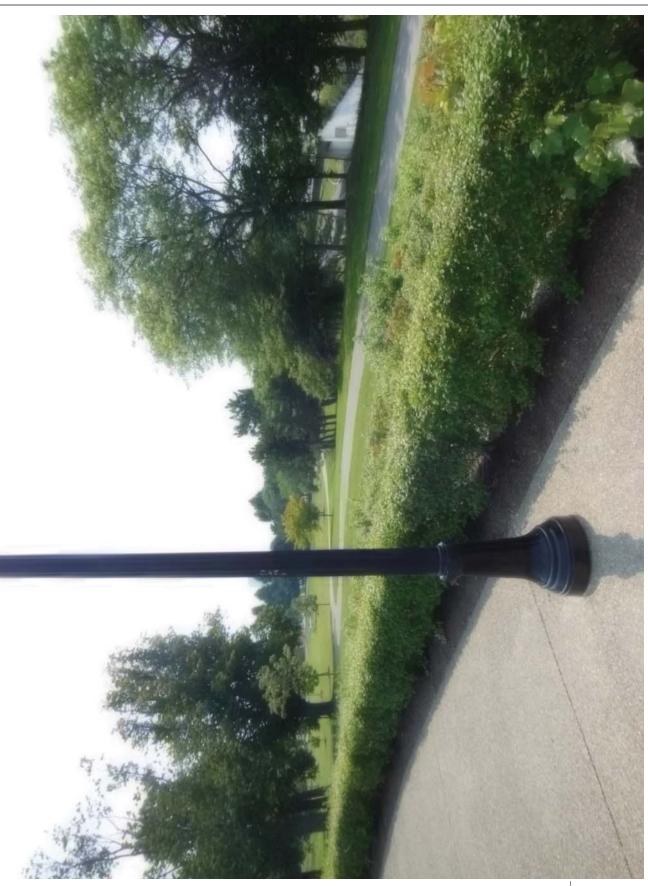
Unity: The lawn and landscaping are well maintained. The landscape palette of colors, textures and forms provides a harmonious natural viewshed. The absence of man-made features strengthens the natural forms of the landscape. The unity rating is very high.

Table 18: View 2 - Proposed Visual Quality Evaluation Summary.

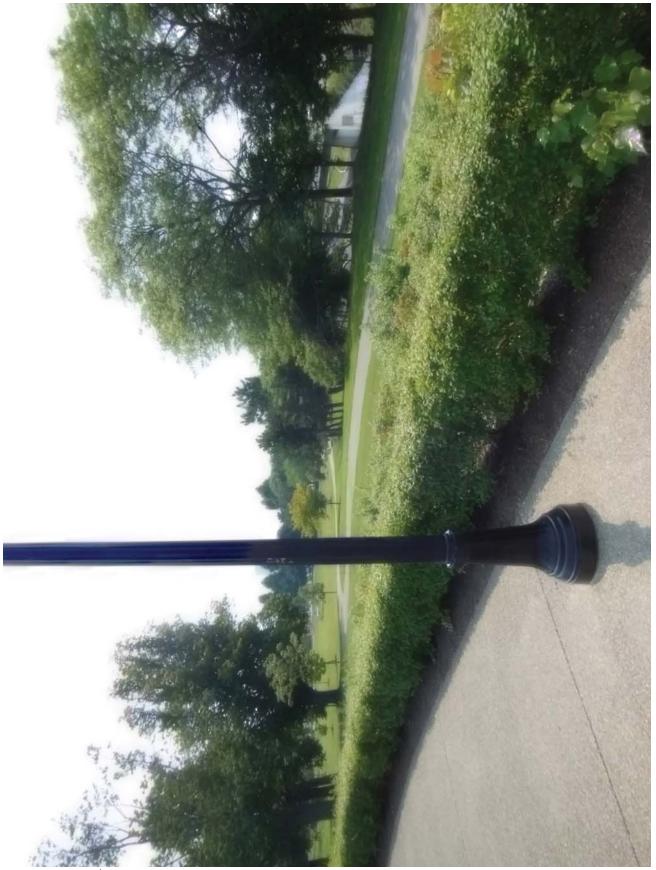
View	Vividness	Intactness	Unity	Visual Quality
View 2 - Front Park Looking South	5.5	6.5	6.5	6.2













4.1.4 View 3 - Front Park Looking Northwest

Little has visually changed to this viewshed. The minimal widening of Ramp A is unnoticeable in the background due to the park's natural evergreen buffer. Providing additional vegetation in this area will improve the screening of the ramp.

Vividness: The view is dominated by the mass of evergreens in the middleground and manicured hedge in the foreground. These elements are typical and provide little to the visual distinctiveness of the landscape which makes it unmemorable. The vividness rating is moderate/average.

Intactness: While the landscaping is intact, the man-made features of Ramp A, including the widening, and the chain-link fence subtract from the natural environment. The visual integrity is provided by the longitudinal patterns of the hedge, evergreen trees and Ramp A. The intactness rating is moderate/average.

Unity: The forms of the hedge, evergreens and Ramp A combine to form a cohesive visual pattern between the man-made and natural features. However, the mass of evergreens obscures the background that subtracts from overall unity of the viewshed. The unity rating is moderately high.

Table 19: View 3 - Proposed Visual Quality Evaluation Summary.

View	Vividness	Intactness	Unity	Visual Quality
View 3 - Front Park Looking Northwest	4.0	3.5	4.5	4.0



Figure 33: View 3 - Existing View Looking Northwest





Figure 34: : View 3 - Proposed View Looking Northwest





View 4 - Front Park Looking East

The removal of Baird Drive strenghten's the park's open viewshed across the lawn area. The terrace pavement still dominate's the foreground and the minor vegetation remains unchanged.

Vividness: The view is dominated by the pavement of the terrace in the foreground and the open lawn of the middleground which contain no unique or memorable elements. The minor trees in the middleground and the landscaping off in the distance is typical and is not visually striking. The vividness rating is low.

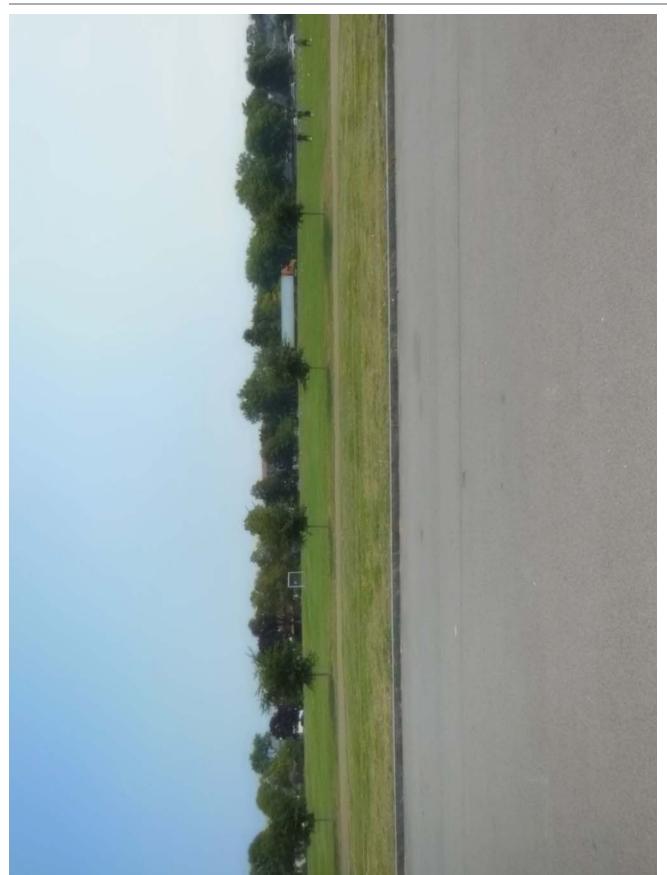
Intactness: There is a strong visual order with the pavement in the foreground, open lawn in the middleground and the landscaping in the background. The minor trees do little to subtract from this order, while the removal of man-made features, including Baird Drive, strengthens the open lawn area. The intactness rating is high.

Unity: The linear forms of the pavement, open lawn and landscaping in the background create a cohesive visual pattern between the man-made and natural features. However, the contrasting colors and textures between the pavement and landscaping provides no integration of the man-made development with the natural setting. The unity rating is moderate/average.

Table 20: View 4 - Proposed Visual Quality Evaluation Summary.

View	Vividness	Intactness	Unity	Visual Quality
View 4 - Front Park Looking East	1.5	6.5	4.0	4.0















60

4.1.6 View 5 - Busti Avenue Looking West

Lake Erie remains partially obscured by the natural vegetation and plaza in the background. The removal of Baird Drive, including the lighting and roadway signage, provides clear unobstructed views across the park's open lawn. The park's open lawn now dominates the middleground.

Vividness: The view is dominated by Busti Avenue and the park's open lawn which contain no unique or memorable elements. The striking view of Lake Erie is obscured by the vegetation and plaza subtracting from the water's relation to the landscape. The vividness rating is low.

Intactness: There is a strong visual order with the pavement in the foreground, open lawn in the middleground and the landscaping in the background. The minor trees do little to subtract from this order, while the removal of man-made features, including Baird Drive, strengthens the open lawn area. Few man-made features dot the landscape providing a more naturalized viewshed. The intactness rating is high.

Unity: The linear forms of the pavement, open lawn and landscaping in the background create a cohesive visual pattern between the man-made and natural features. The contrasting colors and textures between the pavement and landscaping provides no integration of the man-made development with the natural setting. There is no strong connection to the water. The unity rating is moderate/average.

View 5 - Proposed Visual Quality Evaluation Summary.

View	Vividness	Intactness	Unity	Visual Quality
View 5 - Busti Avenue Looking West	2.0	5.5	4.0	3.8





Figure 37: View 5 - Existing View Looking West









4.1.7 View 6 - Vermont Street Looking Southwest

Very little has visually changed to this viewshed. The removal of the signals in the background is the only change. The plaza's employee entrance and facility remain visible in the background obscuring the view to Canada. And the numerous utility wires and poles dot the landscape with mature and young trees lining the street.

Vividness: The lining of street trees manipulate the view focusing on the Plaza's gated entrance and facility which is not unique or memorable. Man-made elements are scattered throughout the view providing too many contrasting elements. The vividness rating is low.

Intactness: The two story residences with the street trees present a fairly intact view of an urban residential street. The varying architectural styles, materials, colors and textures is typical for this type of neighborhood. Utility poles and overhead wires encroach on the residential street image. The intactness rating is low.

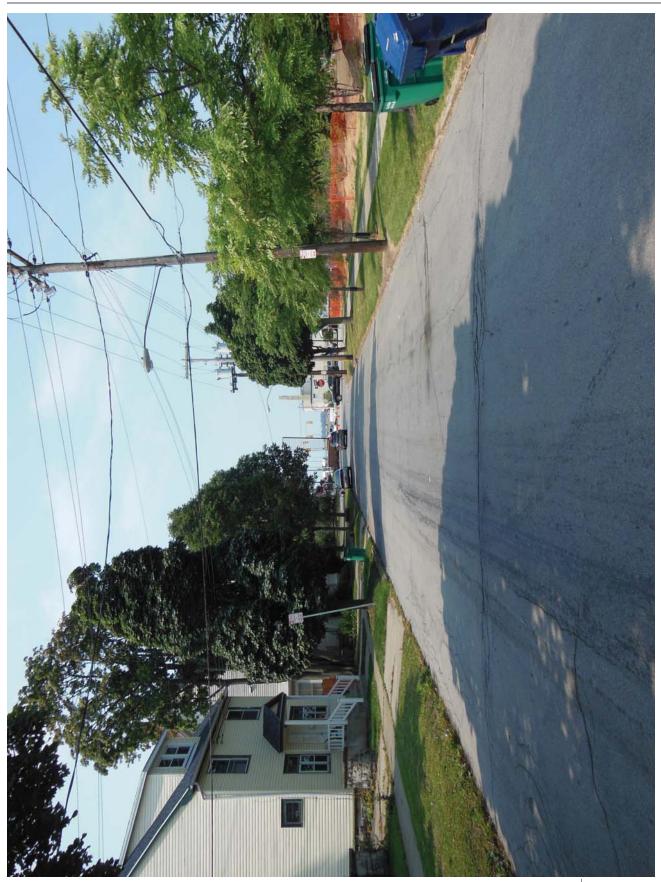
Unity: Street details, including pavement, sidewalks, planting area and lawn, are well defined and maintained. The utility poles and overhead wires degrade the overall harmony of the view. The unity rating is low.

View 6 - Proposed Visual Quality Evaluation Summary.

View	Vividness	Intactness	Unity	Visual Quality
View 6 - Vermont Street Looking Southwest	1.5	2.5	2.5	2.2

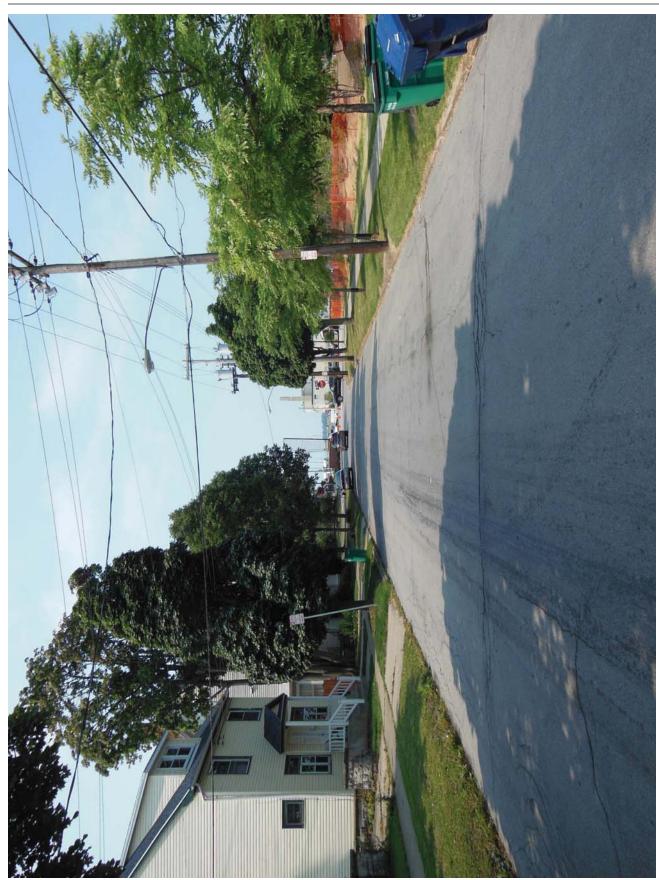
















4.1.8 View 7 - Shoreline Trail Looking South

The open view of Lake Erie is obscured by the pedestrian bridge, while Black Rock Canal is completely obscured. The view is dominated by the structural elements and roadway utilities of Ramp S.

Vividness: The elimination of the open view of Lake Erie reduces this unique element and refocuses on the roadway structural and utility elments making this view unmemorable. The vegetation and water provides some color and texture to the viewshed. The vividness rating is moderate/average.

Intactness: The vegetation and pedestrian bridge obscures the visual connection to the distant water of Lake Erie, and the roadway's pavement and water present conflicting landscape characters. Man-made elements are scattered throughout the view providing too many contrasting elements. The intactness rating is low.

Unity: The lack of a visual connection between the water and the roadways creates little harmony between the man-made and natural elements. The linear wall and the vegetation screen do little to integrate the man-made features with the landscape. The unity rating is moderately low.

Table 21: View 7 - Proposed Visual Quality Evaluation Summary.

View	Vividness	Intactness	Unity	Visual Quality
View 7 - Shoreline Trail Looking South	3.5	2.0	2.5	2.7















4.1.9 View 8 - Southbound I-190 Looking South

The view is dominated by the pedestrian bridge and highway, with views of the roadside vegetation and Plaza to the east and the vegetation to the west obscured by the pedestrian bridge.

Vividness: The view of the pedestrian bridge crossing the viewshed provides a unique element within a typical highway viewshed. Man-made elements are scattered throughout the view providing too many contrasting elements. The vividness rating is moderate/average.

Intactness: The pedestrian bridge and highway disrupt the connection between the natural settings on the east and west, with the bridge almost eliminating the vegetation on the west. The intactness rating is low.

Unity: The various highway features and minimal vegetation provides little harmony between the man-made features and the natural elements. However, the similar color and simple textures of the pedestrian bridge provides some unity within the man-made features. The unity rating is moderately low.

Table 22: View 8 - Proposed Visual Quality Evaluation Summary.

View	Vividness	Intactness	Unity	Visual Quality
View 8 - Southbound I-190 Looking South	3.5	1.5	3.5	2.8



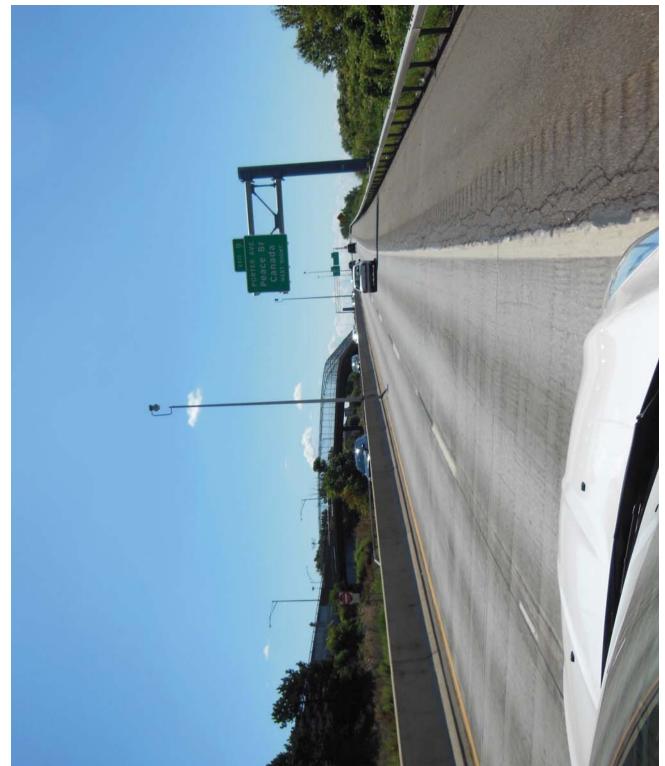


Figure 43: View 8 - Existing View Looking South







75





4.1.10 View 9 - Shoreline Trail Looking North

The view is dominated by vegetation in the foreground. The ramp up to the pedestrian bridge focuses the viewshed towards the Peace Bridge, partially obscuring the bridge in the background. The Niagara River is slightly visible off to the west while the underpass of the riverwalk and the I-190 above is visible to the east.

Vividness: The view along the Shoreline Trail presents an attractive view of the Peace Bridge in the distance. The introduction of the pedestrian bridge and ramp reduces the overall impact from the varying texture and color from the overgrown vegetation in the foreground and middleground. The vividness rating is moderately high.

Intactness: The Peace Bridge structure and the pedestrian bridge and ramp encroaches on the mainly natural landscape within the viewshed drawing ones focus away from the landscape and onto the man-made structures. The chain-link fence within the vegetation competes with the natural form, colors and texture of the landscape. The intactness rating is low.

Unity: The pedestrian bridge and ramp plus the Peace Bridge in the background, reduces the unity between the natural vegetaion and man-made structures. The Shoreline Trail's ramp disrupts the natural vegetaion along the shoreline, reducing the overall unity of the natural landscape. The unity rating is moderately low.

Table 23: View 9 - Proposed Visual Quality Evaluation Summary.

View	Vividness	Intactness	Unity	Visual Quality
View 9 - Shoreline Trail Looking North	6.0	1.5	2.5	3.3





Figure 45: View 9 - Existing View Looking North











4.1.11 View 10a - Porter Avenue Looking Northeast (Roundabout Option)

Porter Avenue drops of in the middleground just beyond the roundabout and rises in the background. The wide span of pavement from the roundabout dominates the view with the street trees and vegetation in the foreground and middleground framing the viewshed. Commercial buildings remain visible in the background off to the south.

Vividness: The foreground and middleground views are dominated by the roundabout, which is a unique element within the viewshed. The lack of a focal element within the roundabout provides a more typical streetscape and is unmemorable. The commercial buildings in the background are partially obscured by the vegetation. The vividness rating is moderate/average.

Intactness: The roundabout disrupts Porter Avenue and its street trees reducing the visual continuity from foreground to background. However, the roadside elements, such as sidewalks, street trees and maintained lawn areas provide visual order. The intactness rating is moderate/average.

Unity: The colors, textures and patterns of the roadside elements unify the man-made elements. The addition of the natural landscape creates a coherent visual pattern. The unity rating is moderately high.

Table 24: View 10 - Proposed Visual Quality Evaluation Summary.

View	Vividness	Intactness	Unity	Visual Quality
View 10 - Porter Avenue Looking Northeast	3.5	3.5	5.0	4.0















4.1.12 View 10b - Porter Avenue Looking Northeast (Intersection Option)

Porter Avenue drops of in the middleground just beyond the intersection and rises in the background. The wide span of pavement from the intersection dominates the view with the street trees and vegetation in the foreground and middleground framing the viewshed. Commercial buildings remain visible in the background off to the south.

Vividness: The foreground view is dominated by the intersection, which is typical and unmemorable. The lack of a focal element within the viewshed provides a more typical streetscape and is unmemorable. The commercial buildings in the background are partially obscured by the vegetation. The vividness rating is low.

Intactness: The intersection disrupts Porter Avenue reducing the visual continuity from foreground to background. However, the roadside elements, such as sidewalks, street trees and maintained lawn areas provide visual order. The intactness rating is moderate/average.

Unity: The colors, textures and patterns of the roadside elements unify the man-made elements. The addition of the natural landscape creates a coherent visual pattern. The unity rating is moderately high.

Table 25: View 10 - Proposed Visual Quality Evaluation Summary.

View	Vividness	Intactness	Unity	Visual Quality
View 10 - Porter Avenue Looking Northeast	2.5	3.5	5.0	3.7





Figure 49: View 10 - Existing View Looking Northeast







88





4.1.13 View 11 - D'Youville College Athletic Fields Looking North

The college's open fields dominate the view in the foreground while the retaining wall for the roundabout partially screen views of Porter Avenue and Ramp P and PN. The additional vegetation balances the loss of vegetation due to the roundabout retaining the overall natural setting of the viewshed.

Vividness: The open lawn in the foreground dominates the view and does not contain any unique or memorable elements. The Porter Avenue roundabout in the middleground, with its utility and streetscape elements are typical and unmemorable. The vividness rating is low.

Intactness: Except for the roundabout's retaining wall in the middleground, the vegetation in the middleground and background is mainly intact. In addition, the roundabout does little to disrupt the visual relationship between the open lawn and wooded background. The utility and streetscape vertical elements partially disrupts the natural setting of the viewshed. The intactness rating is moderate/average.

Unity: The wooded areas in the background are somewhat visually integrated with the open lawn in the foreground, providing a predominantly natural environment. The retaining wall, minimal utility poles with overhead wires and street lights do little to visually disrupt the viewshed. The unity rating is moderately low.

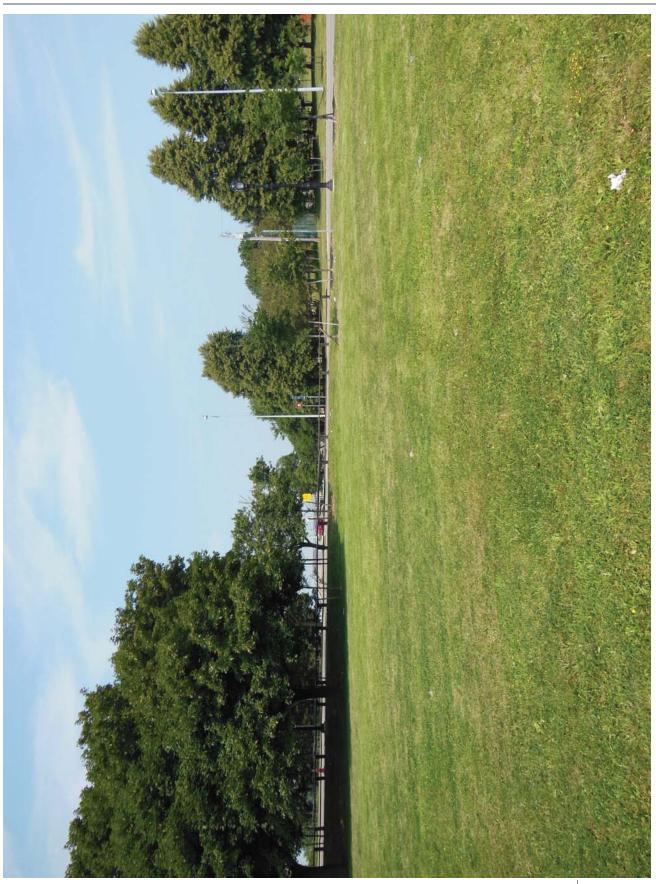
Table 26: View 11 - Proposed Visual Quality Evaluation Summary.

View	Vividness	Intactness	Unity	Visual Quality
View 11 - D'Youville College Athletic Fields Looking North	2.5	4.0	3.0	3.2



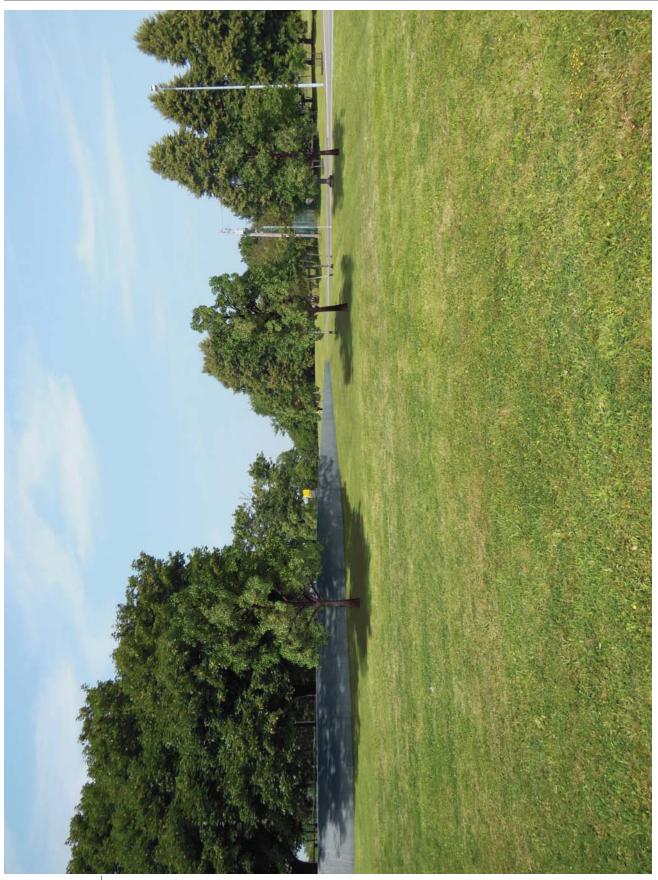
89













4.2 VIEWER RESPONSE

The following provides the predicted viewer response for the four viewer groups based on the physical factors listed in Section 3. The visual quality rating for key views shown in Table 15 were studied further with consideration of the viewer group's perspective. In some cases, the effect on visual resources would be greater from the viewer's perspective.

Based on the City's recommendations for avoiding loss of existing visual access and minimizing adverse impacts of new development on visual access (refer to Section 2.4) and the viewer's understanding of the existing visual character, local residents, business employees and commuters from urban residential and commercial/institutional landscape units are predicted to respond negatively to changes in the visual environment because of the addition of new ramps, bridges, pavement, and utility structures. Each of these viewer groups have opportunity for prolonged and in some cases, unobstructed views of the NYGCIP, providing them the most exposure to the proposed project. The removal of Baird Drive within the park is predicted to provide a positive response from the viewer groups. The introduction of the roundabout or signalized intersection and the additional ramps and bridges along Porter Avenue will provide a negative response due to the loss of vegetation. However, the continuous roadway connectivity, with street streets and sidewalks along the Porter Avenue corridor will remain.

The response from travelers within the transportation corridors to the change in visual quality is predicted to be neutral. These viewers will move quickly and have less time to view the NYGCIP, focusing their attention on other motorists, signage and the roadway. While travelers entering from the Peace Bridge may have prolonged views of the NYGCIP as they wait to be processed, typically their focus is on the surrounding visual environment which the proposed project does not change. In some viewsheds, the proposed project provides new focal features, such as views from the I-190, with the introduction of new ramps and bridges. It is predicted the travelers will have a low response due to their minimal sense of identity with the area and traveling at a high rate of speed in conjunction with narrow visual fields their primary focus will be on the highway traffic and signage. The low response will be offset by local residents and business employees utilizing these transportation corridors that would have a familiarity with the area, which are predicted to have a moderate response to the visual changes. Resulting in an overall predicted viewer response of neutral.

The response from recreational users within the recreation/parkland and river/waterfront landscape units is predicted to be moderate. While these viewers are highly sensitive to the visual environment and tend to have prolonged views due to their activities it is the existing buffer within the park and changes along the Shoreline Trail that the response is predicted to be moderate. Views within Front Park of the proposed project are screened by the existing buffer and with the removal of Baird Drive and restoring green space, it is predicted the viewer response will be low. This low response is offset by the visual changes along the Shoreline Trail. This area has the most change to the visual environment, with the addition of the pedestrian bridge, ramp and trail within an existing vegetative corridor, the recreational users will have prolonged views of the visual change. It is predicted the viewer response will be moderately high in this area.

5 MITIGATION

Mitigation options are limited, given the nature of the project and the constraints of the roadways' existing right-of-way. The following mitigation measures will reduce or eliminate the visual impacts of the project and are categorized into the following groups:

- Professional design and siting; and
- Maintenance.

5.1 Professional Design and Siting

The reduction of visual quality for the viewer groups will be avoided, minimized, and/or mitigated by the following strategies.

- Landscape Screening: While it will not be possible to screen the entire NYGCIP with vegetation, it will be beneficial, in certain locations, to provide additional vegetation to existing natural buffers to improve the screening of parts of the proposed project. Locations where existing vegetation is adjacent to the project area, including areas along Front Park's edges, additional vegetation will be used to soften the contrast between the new ramps, bridges and roadways, and the surrounding landscape.
- Low Profile: Given the horizontal layout and the varying road network of the project area within the viewsheds, reducing ramp and bridge profiles will integrate these structures into the surrounding landscape and reduce the visual impact of the NYGCIP. Consideration to required clearances shall be necessary but minimizing these clearances to allow for low profiles will be incorporated.
- Lighting: While the Plaza and NYSDOT has set lighting standards and levels, to ensure safe ingress and egress
 operations, the lighting design will include measures to minimize light spill over onto adjacent properties especially
 along the edges adjacent to Front Park and Porter Avenue. Measures to reduce spillover will include full cuttoff
 fixtures and where feasible, lower poles.
- Structural Elements: Color, texture and patterns will be incorporated into the design of the structural elements. This will improve the proposed project's integration within the existing man-made and natural environments.

5.2 Maintenance

How the landscape and structures within the NYGCIP are maintained has implications to the overall visual quality and will include the following strategies.

- Roadway Maintenance: Streetscape improvements for the adjacent roadways, including Porter Avenue, will be
 maintained. Structures, including ramps and bridges, will be regularly maintained as part of the City's and NYSDOT's
 maintenance program.
- Landscape Maintenance: Regular activities including mowing, weeding, and pruning will be performed on all
 landscape areas to promote and maintain healthy trees and shrubs. Fertilizing of trees will ensure growth and in
 locations where landscaping is adjacent to natural settings. Removal of invasive species will ensure native species
 will establish themselves in the landscape.





This page left intetionally blank.

6 Conclusions

The overall visual impact of the NYGCIP, according to the ratings defined in Section 4.1 (refer to Table 25), is determined to be Moderate / Average because it will result in a moderate/average change to the visual resources with moderate viewer response. Impacts can be mitigated in less than five years using the measures listed in Section 5.

Table 27: Overall Visual Quality Rating.

Key view	Existing Condition	Proposed Condition	Visual Quality Change
View 1a - Porter Avenue Looking Southwest (Roundabout Option)	2.8	3.0	+ 0.2
View 1b - Porter Avenue Looking Southwest (Intersection Option)	2.8	2.8	0
View 2 - Front Park Looking South	6.2	6.2	0
View 3 - Front Park Looking Northwest	4.0	4.0	0
View 4 - Front Park Looking East	3.8	4.0	+ 0.2
View 5 - Busti Avenue Looking West	3.5	3.8	+ 0.3
View 6 - Vermont Street Looking Southwest	2.2	2.2	0
View 7 - Shoreline Trail Looking South	3.8	2.7	- 1.2
View 8 - Southbound I-190 Looking South	2.5	2.8	+ 0.3
View 9 - Shoreline Trail Looking North	4.5	3.3	- 1.2
View 10a - Porter Avenue Looking Northeast (Roundabout Option)	3.8	4.0	+ 0.2
View 10b - Porter Avenue Looking Northeast (Intersection Option)	3.8	3.7	- 0.1
View 11 - D'Youville College Athletic Fields Looking North	3.5	3.2	- 0.3
Overall Visual Impact	3.7	3.5	- 0.2



This page left intentionally blank.



7 References

City of Buffalo Local Waterfront Revitalization Program. City of Buffalo, May 2003.

Buffalo Green Code, Draft Land Use Plan. City of Buffalo, June 2012.

Buffalo Green Code, A Preview of Buffalo's New Zoning. City of Buffalo, June 2012.

Buffalo's Comprehensive Plan. City of Buffalo, February 2006.

Visual Impact Assessment for Highway Projects. Publication No. FHWA-HI-88-054. Office of Environmental Policy, U.S. Department of Transportation. Federal Highway Administration. Washington D.C. March 1988.

Assessing and Mitigating Visual Impacts. Publication No. DEP-00-2. New York State Department of Environmental Conservation. New York, July 2000.

Guidelines for Landscape and Visual Impact Assessment, Second Edition. The Landscape Institute, 2008.





This page left intentionally blank.

8 GLOSSARY

Dominance: Dominance of components or specific features in a scene may be dominant because of prominent positioning, contrast, extent, or importance of pattern elements.

Intactness: The integrity of visual order in the natural and man-built landscape, and the extent to which the landscape is free from visual encroachment.

Landscape: Landform and land cover forming a distance visual pattern. Land cover comprises water, vegetation and manmade development, including cities.

Landscape Unit: An area or volume of distinct landscape character which forms a spatially enclosed unit at ground level; it may include more than one landscape type; outdoor room. The extent of a single landscape type which is not spatially enclosed at ground level.

Regional Setting: The regional landscape establishes the general visual environment of the project, but the specific visual environment upon which this assessment will focus is determined by defining landscape units and the project viewshed.

Sight Line: The unobstructed line of sight between an observer and viewed object.

Texture: The visual or tactile surface characteristic of various elements in the landscape; often the least dominant of the four visual pattern elements.

Uniqueness: A resource-oriented criterion: a visual resource, visual character, or visual quality which is rare or uncommonly found at a regional or national scale.

Unity: The degree to which the visual resources of the landscape join together to form a coherent, harmonious visual pattern. Unity refers to the compositional harmony or inter-compatibility between landscape elements.

Viewer Activity: The extent of a viewer's ability to perceive the landscape and its detail may be heightened or decreased by the visual requirements of his current activity and his past experience of the landscape.

Viewer Awareness: A viewer's receptivity to the visual character of the landscape can be affected by elements and relationships in the landscape setting itself or by expectations about the setting. Visual experience contrary to expectation may be suppressed or heightened, depending on the degree of disagreement.

Viewer Exposure: The degree to which viewers are exposed to a view by their physical location, numbers viewing and duration of view.

Viewer Groups: Classes of viewers differentiated by their visual response to the highway and its setting; response is affected by viewer activity, awareness and values.

Viewer Response: Measures of viewer response to change in visual resources include viewer exposure, viewer sensitivity, cultural significance and local values.



NEW YORK GATEWAY CONNECTIONS IMPROVEMENT PROJECT TO THE US PEACE BRIDGE PLAZA



Viewer Sensitivity: The viewer's variable receptivity to the elements within the environment that he is viewing, affected by viewer activity and awareness. A person cannot readily notice every object and all the attributes of the objects that compose the total visual environment.

Viewshed: A viewshed is a subset of a landscape unit and is comprised of all the surface areas visible from an observer's viewpoint. The limits of a viewshed are defined as the visual limits of the views located from the proposed project. The viewshed also includes the locations of viewers likely to be affected by visual changes brought about by project features.

View: A scene observed from a given vantage point.

Visual Character: The visual character of a landscape is formed by the order of the patterns composing it. The elements of these patterns are the form, line, color and texture of the landscapes visual resources. Their interrelationships can be objectively described in terms of dominance, diversity, and continuity.

Visual Impact: The degree of change in visual resources and viewer response to those resources caused by highway development and operations.

Visual Quality: While many factors contribute to a landscape's visual quality, they can ultimately be grouped under three headings: Vividness, Intactness and Unity.

Visual Resources: The appearance of the features that make up the visible landscape. Includes the land, water, vegetative, animal, and other features that are visible on all national resource lands. (U.S.F.S.)

Vividness: The memorability of the visual impression received from contrasting landscape elements as they combine to form a striking and distinctive visual pattern.